

Introduction

Since the 1960s, Asians are regarded as the “model minority” in the U.S. and later in other white-dominated western countries (Sakamoto et al., 2012; Wing, 2007). The Model Minority Myth (MMM) is a stereotype that depicts Asian immigrants as hard-working, high-achieving and economically successful compared to other ethnic minorities, leading to several harmful consequences for all minority groups. Numerous studies discussed its social, educational, and health and wellbeing impacts (Walton and Truong, 2022), related to racial identity (Park, 2010), academic pressure and high expectations (Wong, 2015), psychological distress (Atkin et al., 2018). Researchers argue that the MMM has the purpose of maintaining anti-Black discrimination and white supremacy, as well as hindering affirmative action policies (Poon et al., 2016; Kim and Sakamoto, 2010).

Using Oaxaca-Blinder decomposition, this paper examines the role of the MMM in the UK by comparing the White-Asian wage differential with the White-Black wage differential, tracing the roots of these differences in belief-based discrimination. As literature reported its negative effects, this research aims at adding evidence and support to existing studies. Moreover, the results would contribute to demystifying the MMM and encouraging policy intervention to dismantle it, which both underline the relevance of this research question.

Literature review

Existing research has explored differences in earnings among ethnicities. Hirschman and Wong (1984) report that there is not a wide difference in earnings and occupational attainments between whites and Asians in the U.S. and Hirschman and Snipp (2001) underline that these outcomes are possible because of Asian Americans educational advantage, without which they would otherwise present similar results as blacks or Hispanics.

Kim and Sakamoto (2010) use regression models controlling for several variables to examine the wage gap between white and Asian men in the U.S. They showed that non-immigrant Asian Americans achieved labor market parity, while native-born Asian Americans still lag behind white males. Arabsheibani and Wang (2008) used Oaxaca-Ramson decomposition to find that most Asian Americans have higher education levels than whites but fail to earn as much as them. However, they similarly show that second generation Asians almost achieved complete parity. Consistent with previous research, I expect similar results for Asians in the UK. So far as my knowledge is concerned, no research has investigated the comparison between Asian and black communities' racial disadvantage in earnings relative to whites.

Furthermore, many studies examined the negative consequences of the MMM. Wong (2015) conducted interviews to teachers and British Chinese and Indian students, asking questions on academic expectations and career aspirations. The responses show that high achieving students may feel higher pressure to meet family and societal expectations on grades and careers, whereas being considered a model minority can harm those who are not high achievers and who may feel not enough for their ethnicity. Finally, Wong calls for policy interventions, such as those aiming at widening career pathways for MM students. Wong and Halgin (2006) draw similar conclusions, stating that the MM label is more of a bane than a blessing for Asians, dismissing them as individuals and assuming they behave in stereotypical ways.

Data analysis

i. Data

All data comes from the UK household longitudinal survey Understanding Society, wave 11 (2019-2020), selecting white, Asian and black participants. I used Oaxaca-Blinder decomposition to analyse the wage differential among the ethnic groups as it allows to distinguish between a portion explained by characteristics and an unexplained portion possibly due to discrimination. The dependent variable of my model is the logarithm of monthly labour income. The control variables are age, weekly hours worked, a binary variable that takes value 1 if the individual lives in an urban area and value 0 otherwise, educational attainment and job sector. Moreover, to control for the stereotype, I constructed two dummy variables as independent controls that indicate whether the respondent conforms to the MM stereotype: *Degree* takes value 1 for individuals with a degree and value 0 otherwise; *Manager* takes value 1 for individuals in “manager and other professional” job classification and value 0 otherwise.

ii. Regression models

The Table 1 shows the results of the group-specific regression models for white, Asian and black subgroups, first with all the covariates and the highest educational attainment dummy, then including also the management binary control and their interaction term.

Specification	Dependent variable: log monthly labour income					
	White		Asian		Black	
	Partial	Full	Partial	Full	Partial	Full
Age	0.0079*** [0.0004]	0.0077*** [0.0004]	0.0095*** [0.0013]	0.0090*** [0.0013]	0.0123*** [0.0024]	0.0119*** [0.0024]
Urban	0.0049 [0.0109]	0.0048 [0.0108]	-0.0635 [0.1092]	-0.0881 [0.1083]	-0.1211 [0.2536]	-0.1109 [0.2532]
Hours worked	0.0396*** [0.0005]	0.0393*** [0.0005]	0.0365*** [0.0015]	0.0364*** [0.0015]	0.0243*** [0.0031]	0.0243*** [0.0030]
Education	0.0673*** [0.0063]	0.0732*** [0.0063]	0.0454** [0.0212]	0.0595** [0.0212]	0.1064** [0.0397]	0.1121** [0.0399]
Job sector	0.1151*** [0.0032]	0.0660*** [0.0051]	0.1338*** [0.0105]	0.0928*** [0.0163]	0.1041*** [0.0199]	0.0525* [0.0308]
Degree	0.1273*** [0.0172]	-0.0150 [0.0234]	0.1928** [0.0587]	0.0358 [0.0696]	0.1550 [0.1097]	0.0644 [0.1344]
Manager	NA	0.1655** [0.0198]	NA	0.0591 [0.0702]	NA	0.2003 [0.1340]
Degree×Manager	NA	0.1705** [0.0226]	NA	0.2387* [0.0699]	NA	0.0946 [0.1432]

Table 1: Linear regressions of white, Asian and black specifications

Note: *** $p < 0.001$, ** $p < 0.001$, * $p < 0.1$

In all the partial specifications, the *Degree* coefficient is the highest for Asians, while it is not significant for black participants. Indeed, having a degree positively changes earnings by 19% for Asians. By adding all the controls, for all the specifications *Degree* is not significant, while *Manager* is statistically significant only for whites. The interaction term is significant and relatively higher for Asians, meaning that having a degree and being a manager

or other professional has a stronger effect on earnings for Asians, equivalent to a 24% increase in wages. In the black specification, none of the variables indicating a match with the stereotype are significant.

iii. Oaxaca-Blinder decompositions

I ran two different decompositions. The first one for examining the gap between whites and Asians, whereas the second one analyses the White-Black differential. For both specifications, I report the results of the model that includes the constructed binary variable *Degree* and the results of the model that incorporates also the dummy for

Specification	White-Asian		White-Black	
	Partial	Full	Partial	Full
Log monthly wage difference		0.0488* [0.0242]		0.0705 [0.0392]
<i>Amount due to:</i>				
characteristics	0.0532 [0.0326]	0.0601* [0.0325]	0.0362 [0.0669]	0.0419 [0.0672]
coefficients	0.0155 [0.0167]	0.0063 [0.0166]	0.0425 [0.0329]	0.0343 [0.0328]
<i>Differences due to characteristics:</i>				
Age	0.0430*** [0.0070]	0.0409*** [0.0069]	-0.0112 [0.0077]	-0.0108 [0.0074]
Urban	0.0154 [0.0265]	0.0213 [0.0262]	0.0300 [0.0628]	0.0274 [0.0627]
Hours worked	0.0257* [0.0119]	0.0256* [0.0119]	0.0136 [0.0119]	0.0137 [0.0119]
Education	-0.0129* [0.0063]	-0.0169* [0.0065]	-0.0161* [0.0090]	-0.0170* [0.0093]
Job sector	0.0092 [0.0070]	0.0064 [0.0050]	0.0279** [0.0099]	0.0141 [0.0093]
Degree	-0.0272** [0.0088]	-0.0050 [0.0098]	-0.0080 [0.0066]	-0.0033 [0.0071]
Manager	NA	0.0018 [0.0024]	NA	0.0174 [0.0125]
Degree×Manager	NA	-0.0141** [0.0053]	NA	0.0003 [0.0020]
<i>Differences due to coefficients:</i>				
Age	-0.0632 [0.0551]	-0.0509 [0.0547]	-0.2000* [0.1092]	-0.1870* [0.1091]
Urban	0.0669 [0.1075]	0.0909 [0.1066]	0.1240 [0.2499]	0.1138 [0.2494]
Hours worked	0.1020* [0.0510]	0.0931* [0.0505]	0.4986*** [0.1001]	0.4859*** [0.0998]
Education	0.1051 [0.1063]	0.0662 [0.1062]	-0.130 [0.1879]	-0.1818 [0.1889]
Job sector	-0.0650* [0.0380]	-0.0933 [0.0593]	0.0360 [0.0660]	0.0440 [0.1024]
Degree	-0.0335 [0.0313]	-0.0259 [0.0375]	-0.0117 [0.0468]	-0.0334 [0.0575]
Manager	NA	0.0495 [0.0340]	NA	-0.0143 [0.0555]
Degree×Manager	NA	-0.0232 [0.0250]	NA	0.0211 [0.0403]

Table 2: Oaxaca-Blinder decompositions of White-Asian and White-Black specifications

“manager or other professional” and the interaction term between the two. Table 2 shows the results of the Oaxaca-Blinder decompositions.

The raw log-wage differential between white and Asians is positive and statistically significant. However, it is not as high as the White-Black raw differential. We can see that the explained portion is greater for the Asian specification compared to the black one. The reverse is true for the unexplained part, suggesting that the difference due to characteristics is wider for Asians. Nevertheless, these coefficients are not all statistically significant. More in detail, in the partial specifications, the endowments coefficient of *Degree* is negative and statistically significant for White-Asian specification, while it is not for White-Black, meaning that conforming to the stereotype advantages Asian respondents. Regarding the unexplained portion of the gap, there are not many significant findings. Nonetheless, compared to white individuals, who can be considered the reference group, Asians have a higher return to having a degree than black participants as the coefficient is negative for both decompositions, but it is higher for the former ethnicity.

Adding the other variables capturing conformity with the stereotype, we can observe that the endowments coefficient of the interaction term is again negative and significant for Asians and positive and not significant for blacks. There is no statistical significance for the other two variables associated with matching the MMM. Therefore, having a degree and being a “manager or other professional” favors Asian respondents as it can explain a narrowing in the wage differential between white and Asian. As for the unexplained part, only some obtained results are significant. However, it is possible to notice that the interaction term shows higher returns for Asians compared to whites, whereas the opposite is observed for blacks. Indeed, the coefficient is negative in the White-Asian decomposition and positive in the White-Black decomposition.

iv. Belief-based discrimination and limitations

Belief-based discrimination occurs because of people’s inaccurate or biased beliefs. It can justify these results. People may inaccurately believe that Asians are more educated and successful than other ethnic minorities as the MMM states, explaining why the variables that represent compliance with the myth benefit them compared to blacks and relative to whites. This can have negative effects on Asians that meet the stereotype and on those that do not meet the stereotype, since they could be penalized or considered not enough in comparison to peers that comply with the MMM.

Lastly, there are some limitations to this research. Firstly, some of the results obtained by the empirical model are not statistically significant. Therefore, more research is needed to be able to report more significant coefficients. Secondly, to improve the decomposition, it is worth noting that more control variables which can explain wage differentials could be included in the model. In fact, as Kim and Sakamoto (2010) demonstrate, other than educational levels, controls such as college type and field of study are capable of measuring the explained portion of the gap. Finally, distinguishing between different Asian subgroups like Chinese, Indian, Bangladeshi, etc., may help in showing the role of the MMM within the British Asian community.

Conclusion

This research inquires the MMM through a comparison between Asian and black wage gaps relative to whites. MMM-conforming variables seem to explain a reduction in the White-Asian differential and show a link to the unexplained portion, as results report higher earning returns for Asians compared to black individuals. Still, a positive wage gap exists between whites and both minorities. The theoretical approach to these findings is related to belief-based discrimination. These results give evidence to the role of the MMM, which entails potentially harmful consequences. Moreover, it is possible to suggest policy interventions to tackle this stereotype, such as promoting awareness and equity, and supporting Asian minorities that may suffer the most because of the MMM.

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Appendix

I report below the code used in Stata to produce the Data analysis results.

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code X
1 *Code for ECON0110 research project
2
3 *First, some work on the dataset for white-asian decomposition
4 *Working directory
5 cd "C:\Users\liayu\OneDrive - Università Commerciale Luigi Bocconi\Gender and Ethnicity in the
↳ Economy\project"
6
7 *Opening file
8 use "k_indresp.dta", clear
9
10 *Selecting the variables needed
11 keep pidp k_age_dv k_ethn_dv k_employ k_fimnlabgrs_dv k_hiqual_dv k_jbhrs k_urban_dv k_jbnssec5_dv
12
13 *Dropping observations for individuals that are not employed or work less than 0 hours per week
14 drop if k_employ!=1
15 drop if k_jbhrs<0
16
17 *Selecting the ethnicities we're interested in
18 drop if k_ethn_dv<1 // Values from 1 to 4 are for whites
19 drop if k_ethn_dv>13 // Values from 9 to 13 are for Asian ethnicities
20 drop if k_ethn_dv==5 // Values from 5 to 8 are for mixed ethnicities, e.g. white and black, white
↳ and asian, ecc...
21 drop if k_ethn_dv==6
22 drop if k_ethn_dv==7
23 drop if k_ethn_dv==8
24
25 *Dropping observations for missing data about residence (urban/rural), highest qualification, job
↳ sector and monthly labour income
26 drop if k_urban_dv<1
27 drop if k_hiqual_dv<1
28 drop if k_jbnssec5_dv<1
29 drop if k_fimnlabgrs_dv<1
30
31 *Generating new variables: the log of monthly labour income, binary variable for ethnicity
↳ (white=0, asian=1), binary variable for rural (=0) or urban (=1) area
32 generate log_wage=ln(k_fimnlabgrs_dv)
33
34 gen ethnicity=0
35 replace ethnicity=1 if k_ethn_dv>=9 & k_ethn_dv<=13
36
37 gen urban=0
38 replace urban=1 if k_urban_dv==1
39
40 gen age=k_age_dv
41
42 gen hrs_worked=k_jbhrs
43
44 *Generating variables for educational levels and job sectors
45 gen education=1 // Value 1 for "no qualification"
46 replace education=2 if k_hiqual_dv==5 // Value 2 for "other qualification"
47 replace education=3 if k_hiqual_dv==4 // Value 3 for "GCSE"
48 replace education=4 if k_hiqual_dv==3 // Value 4 for "A levels"
49 replace education=5 if k_hiqual_dv==2 // Value 5 for "other higher degree"
50 replace education=6 if k_hiqual_dv==1 // Value 6 for "degree"
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51
52 gen job_sector=1 //Value 1 for "semi-routine & routine"
53 replace job_sector=2 if k_jbnssec5_dv==4 // Value 2 for "lower supervisory & technical"
54 replace job_sector=3 if k_jbnssec5_dv==3 // Value 3 for "Small employers & own account"
55 replace job_sector=4 if k_jbnssec5_dv==2 // Value 4 for "Intermediate"
56 replace job_sector=5 if k_jbnssec5_dv==1 // Value 5 for "Management & professional"
57
58 *Generating a dummy variable that takes value 1 for people that match the stereotype, i.e. that
↳ have the highest level of education, work as manager or other professional and their interaction
↳ term
59 gen high_education=0
60 replace high_education=1 if education==6
61
62 gen manager=0
63 replace manager=1 if job_sector==5
64
65 gen high_education_manager=high_education*manager
66
67 save wh_as_data, replace
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69 *Oaxaca-Blinder decomposition
70 oaxaca log_wage age urban hrs_worked education job_sector, by(ethnicity) noisily
71 oaxaca log_wage age urban hrs_worked education job_sector high_education, by(ethnicity) noisily
72 oaxaca log_wage age urban hrs_worked education job_sector high_education high_education_manager,
↳ by(ethnicity) noisily
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75
76 *Now, some work on the dataset for white-black decomposition
77 *Working directory
78 cd "C:\Users\liayu\OneDrive - Università Commerciale Luigi Bocconi\Gender and Ethnicity in the
↳ Economy\project"
79
80 *Opening file
81 use "k_indresp.dta"
82
83 *Selecting the variables needed
84 keep pidp k_age_dv k_ethn_dv k_employ k_fimnlabgrs_dv k_hiqua1_dv k_jbhrs k_urban_dv k_jbnssec5_dv
85
86 *Dropping observations for individuals that are not employed or work less than 0 hours per week
87 drop if k_employ!=1
88 drop if k_jbhrs<0
89
90 *Selecting the ethnicities we're interested in
91 drop if k_ethn_dv<1
92 drop if k_ethn_dv==5
93 drop if k_ethn_dv==6
94 drop if k_ethn_dv==7
95 drop if k_ethn_dv==8
96 drop if k_ethn_dv==9 // Values from 14 to 16 are for blacks
97 drop if k_ethn_dv==10
98 drop if k_ethn_dv==11
99 drop if k_ethn_dv==12
100 drop if k_ethn_dv==13
101 drop if k_ethn_dv>=17
102
103 *Dropping observations for missing data about residence (urban/rural), highest qualification, job
↳ sector and monthly labour income
104 drop if k_urban_dv<1
105 drop if k_hiqua1_dv<1
106 drop if k_jbnssec5_dv<1
107 drop if k_fimnlabgrs_dv<1
108
109 *Generating new variables: the log of monthly labour income, binary variable for ethnicity
↳ (white=0, black=1), binary variable for rural (=0) or urban (=1) area
110 generate log_wage=ln(k_fimnlabgrs_dv)
111

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112 gen ethnicity=0
113 replace ethnicity=1 if k_ethn_dv>=14
114
115 gen urban=0
116 replace urban=1 if k_urban_dv==1
117
118 gen age=k_age_dv
119
120 gen hrs_worked=k_jbhhrs
121
122 *Generating variables for educational levels and job sectors
123 gen education=1
124 replace education=2 if k_hiqual_dv==5
125 replace education=3 if k_hiqual_dv==4
126 replace education=4 if k_hiqual_dv==3
127 replace education=5 if k_hiqual_dv==2
128 replace education=6 if k_hiqual_dv==1
129
130 gen job_sector=1
131 replace job_sector=2 if k_jbnssec5_dv==4
132 replace job_sector=3 if k_jbnssec5_dv==3
133 replace job_sector=4 if k_jbnssec5_dv==2
134 replace job_sector=5 if k_jbnssec5_dv==1
135
136 *Generating a dummy variable that takes value 1 for people that match the asian stereotype, i.e.
137   ↳ that have the highest education, work as manager or other professional and their interaction term
138 gen high_education=0
139 replace high_education=1 if education==6
140 gen manager=0
141 replace manager=1 if job_sector==5
142
143 gen high_education_manager=high_education*manager
144
145 *Oaxaca-Blinder decomposition*
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